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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,899	10/30/2003	Steven Francis Best	AUS920030792US1	9243

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EXAMINER

HO, BINH VAN

ART UNIT PAPER NUMBER

2163

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/697,899

Applicant(s)

BEST ET AL.

Examiner

Binh V. Ho

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. This is a response to amendment filed 07/27/2006.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Crow (US 2004025490).

(Claim 1)

Crow discloses in figure 8C, a method in a data processing system for storing data in a file system, the method comprising determining whether space is available in an inode for a file in the file system; and responsive to space being available, storing the data in the inode (paragraph [0048], [0053]).

(Claim 2)

Crow discloses in figures 8A-8C, and 10, to determining whether additional data being present; and responsive to the additional data being present, storing the additional data in a partially filled block of another file (paragraph [0038], [0039], [0042] and [0044]).

(Claims 3, 11,18)

Crow discloses in figures 8A-8C, and 10, to responsive to spacing being unavailable, storing the additional data in a partially filled block of another file ([0034], [0038], [0039], [0042], [0044] and [0048]).

(Claims 4,12,19)

Crow discloses in figure 8C, wherein the partially filled block being a last block of the another file (paragraph [0042]).

(Claims 5,13,20)

Crow discloses in figures 5-10, wherein the space being located in an extension area in the inode.

(Claims 6,14,21)

Crow discloses further comprising determining whether a file size for the data being divisible by a block size for blocks in the file system; and if the file size is divisible by the block size, storing the data in a block (paragraph [0031], [0034]).

(Claim 7)

Crow discloses further comprising determining whether space being available in the inode to store the data; and responsive to room being unavailable in the inode, storing the data in a partially filled block of another file ([0048]).

(Claim 8)

Crow discloses in figures 3 and 8C, a data processing system for storing data in a file system, the data processing system comprising a bus system; a communications unit connected to the bus system; a memory connected to the bus system, wherein the

memory includes a set of instructions; and a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to determine whether space is available in an inode of the file in the file system; and store the data in the inode in response to space being available (paragraph [0048] and [0053]).

(Claim 9)

Crow discloses in figure 8C, a data processing system for storing data in a file system, the data processing system comprising determining means for determining whether space is available in an inode of the file in the file system; and storing means, responsive to space being available, for storing the data in the inode (paragraph [0048] and [0053]).

(Claims 10,17)

Crow discloses in figures 5, 8C, and 10, wherein the determining means being a first determining means and the storing means is a first storing means and further comprising second determining means for determining whether additional data is present; and second storing means, responsive to the additional data being present, for storing the additional data in a partially filled block of another file (paragraph [0042]-[0044]).

(Claims 15,22)

Crow discloses in figures 8A-8C, and 10, wherein the determining means being a first determining means and the storing means is a first storing means and further comprising: second determining means for determining whether space is available in the inode to store the data; and second storing means, responsive to room being

unavailable in the inode, for storing the data in a partially filled block of another file ([0034], [0038], [0039], [0042], [0044] and [0048]).

(Claim 16)

Crow discloses in figures 3, and 8C, a computer program product in a computer readable medium for storing data in a file system, the computer program product comprising first instructions for determining whether space is available in an inode of the file in the file system; and second instructions, responsive to space being available, for storing the data in the inode (paragraph [0048] and [0053]).

### **Response To The Arguments**

4. Applicant's arguments filed on 07/27/2006 have been fully considered. Applicant made the following arguments with respect to claims 1 and 2:

Accordingly, Applicant submits that, in claim 1, "Crow does not anticipate claim 1 because Crow does not teach the feature of, "determining whether space is available in an inode for a file in the file system and responsive to space being available, storing the data in the inode" as recited in claim 1."

The Examiner respectfully disagreed with the Applicant's argument above; since Crow discloses (paragraph [0044], [0047] and [0048]) "the operating system determines the maximum number of available contiguous blocks in each logical volume from data in the volume's header or from information in a superblock spanning the entire storage system".

Accordingly, Applicant submits that, in claim 2, " Specifically, Crow does not teach the feature of, "storing the additional data in a partially filled block of another file," as recited in claim 2."

The Examiner respectfully disagreed with the Applicant's argument above; since Crow discloses (paragraph [0036]) "a first portion of the flag field indicates whether the data blocks are locked or unlocked, that is, available or unavailable. The locked designation indicates that access to the data blocks is limited. The processors 44-45 and drivers 47-49 may change the flag field of an extent to the locked designation while manipulating data in the associated data blocks so that other devices do not access the data blocks in parallel. A second portion of the flag field indicates whether empty data blocks have been zeroed. By using the not zeroed designation, the file system can allocate a data block to a file without zeroing the block beforehand. If a subsequent access writes the entire data block, the block will not have to be zeroed saving processing time. A third portion of the flag field categorizes the data type stored in a data block into one of three types, that is, real file data, non-data, or extents".

### ***Conclusion***

5. Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



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### **Inquiry**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583. The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Binh V Ho  
Examiner  
Art Unit 2163



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